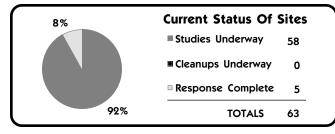
TREASURE ISLAND NAVAL STATION HUNTERS POINT ANNEX SAN FRANCISCO, CALIFORNIA **Engineering Field Division/Activity: EFAWEST** Major Claimant: CINCPACFIT 936 Acres (493 Acres on Land/443 Submerged) Size: **Funding to Date:** \$44,458,000 **Estimated Funding to Complete:** \$427,237,000 Base Mission: Originally modified, maintained and repaired ships until 1974; was leased to Tripple A Machine Shop, Inc. from 1976 to 1986 for commercial ship repair; Department of the Navy regained possession of property in 1987; currently inactive Heavy metals, PCBs, POLs, volatile and semi-volatile organic compounds Contaminants: **Number of Sites:** Relative Risk Ranking of Sites: **NPL** 58 CERCLA: Not Evaluated: 4 High: 99 **RCRA Corrective Action:** 0 5 Medium: Response Complete: RCRA UST: 5 **BRAC II** 63 63 Low: **Total Sites: Total Sites:** EXECUTIVE SUMMARY

Treasure Island Naval Station Hunters Point Annex (NSTI Hunters Point) is in the southeast portion of San Francisco County, California. It is a deactivated Navy shipyard that was selected and approved for closure and disposition by the Base Realignment and Closure (BRAC) Commission in 1991. It is currently under caretaker status by the Naval Facilities Engineering Command's Engineering Field Activity West located in San Bruno, California. Portions of NSTI Hunters Point have already been leased to private parties. Because of the presence of hazardous materials resulting from past shipyard operations and the operations of a commercial machine shop that had leased NSTI Hunters Point from 1976 to 1986, the EPA placed the installation on the NPL in 1989. Site types include landfills and land disposal areas. The Navy Radiological Defense Laboratory (NRDL) used multiple buildings at Hunters Point Annex. The Atomic Energy Commission determined the buildings were clean although the State of California requested additional sampling. Low level radiation was found outside some of the NRDL buildings and continues to be investigated.

NSTI Hunters Point is currently under a Federal Facility Agreement (FFA) that was signed by the Navy, the EPA, and the California Environmental Protection Agency (Cal/EPA) in 1992.

NSTI Hunters Point is on a long promontory in the southeastern portion of San Francisco, extending eastward into San Francisco Bay. The facility is bounded on the north and east by the bay, and on the south and west by the Bayview/Hunters Point district of San Francisco. Between 70 and 80 percent of NSTI Hunters Point is relatively flat lowlands constructed by placing fill materials along the bay margin. The remaining land is on a moderately to steeply sloping ridge. Most of the lowlands are covered by asphalt paving and structures. The open areas are either sparsely vegetated or bare soil. Potential contaminant migration pathways exist via both surface runoff and infiltration of the rain water. Stormwater runoff is channeled to discharge in San Francisco Bay. Stormwater percolating into the soils has the potential to migrate via the groundwater to the San Francisco Bay where both human and ecological receptors are present.



The Technical Review Committee was converted to a Restoration Advisory Board (RAB) in FY94 and has 32 members from the community, local business, and regulatory agencies. An Information Repository was established at two local libraries.

At the end of FY95, preliminary study phases have been completed for all sites, and the Remedial Investigation (RI) phase is underway at 58 sites. Five sites are Response Complete.

Early removal actions include a removal action at Site 8 to remove soil contaminated with the chemical additive PCB in FY90, and tank removals in FY91 and FY92 at several UST sites. At Sites 2 and 6 in FY92, soil contaminated with heavy metals and PCB was removed. Contaminated sludge and a large tank were removed at Site 2 in FY93. Also in FY93 at Site 6 several tanks and underground piping were removed and a clay and gravel cap was placed over the site.

In FY95, removal began of equipment, sunken baths, above ground structures, foundations, and soil contaminated with zinc and chromate at Site 9, The Pickling and Plate Yard. Removal actions planned in FY96 at Parcels B, C, D and E include groundwater pump and treat for a plume, soil removal at storm drains and exploratory excavation.

In FY92, the installation successfully demonstrated an innovative technology for recycling sand blasting grit containing low levels of copper and lead from ship cleaning operations. A full scale demonstration using the grit was completed in FY93. The Navy can use this technology at other installations.

In 1991, NSTI Hunters Point was included in the Base Realignment and Closure (BRAC) Program. A revised approach to investigation and remediating sites was implemented at this time. Sites were divided into geographic areas, Parcels A-F, to facilitate investigation and remediation. The intent is to sell the land, parcel by parcel, as various parcels are remediated. The concerns of the local community are primarily economic reuse of the facility, and increasing the economic potential of the community. The community has experienced 20 to 30% unemployment since the base was placed in industrial reserve in 1974. Operational base closure was 1 April 1994. The Navy is making local small and disadvantaged business aware of subcontracting opportunities, encouraging mentor and protégé arrangements under large business contracts, and conducting aggressive outreach programs.

As of 30 September 1995

TREASURE ISLAND NS HUNTERS POINT ANNEX **RELEVANT ISSUES**

ENVIRONMENTAL RISK



HYDROGEOLOGY - There are three aquifers under NSTI Hunters Point. The groundwater is not used for any purpose, and no irrigation or water supply wells are located at NSTI

Hunters Point. The nearest public water supply well is about 2.5 miles inland from the base. A commercial bottled-water company, Albion Mountain Spring, is located within 2,300 feet of the facility. Albion Mountain Spring extracts groundwater for commercial sale to the public. However, the groundwater extracted and used by Albion appears to be separate and distinct from the groundwater beneath NSTI Hunters Point. It is unlikely that any contamination found in NSTI Hunters Point groundwater would impact Albion's bottled water supply. Surface water drainage is primarily through sheet-flow runoff. The runoff is collected by an on-site storm drain system that is discharged through several outfalls into San Francisco Bay. No naturally occurring channeled drainage exists; any preexisting drainage channels have been filled or modified by construction over the years.



NATURAL RESOURCES - Terrestrial and aquatic ecosystems are present at NSTI Hunters Point. Although most of NSTI Hunters Point is covered with asphalt, buildings, or other

structures, vegetated areas supporting the terrestrial fauna exist. These are areas of disturbed landscape, nonnative grassland, and salt marsh. All four habitats are somewhat disturbed as a result of past or current activities. The aquatic system consists of wetland, pelagic intertidal, and subtidal habitats that are contiguous with San Francisco Bay. Threatened or endangered species that have been observed at NSTI Hunters Point include chinook salmon, longfin smelt, peregrine falcon, loggerhead shrike, and California brown pelican.



RISK - A three-phased Ecological Risk Assessment (ERA) to determine any potential adverse effects on the biota in the area was completed in August 1994. The first phase involved the

review of existing documentation, performing bioassays and field surveys, and identifying biota. The Ecological Sampling and Analysis Plan is complete and field work began in late FY93. A separate schedule has been established for the investigation of potential impacts from radiation generated from radium dials disposed at Site 1 (Industrial Landfill). Using the DOD Relative Risk Ranking System, 22 sites were ranked high, 28 were ranked medium, and 4 were ranked low risk. Four other sites will be ranked when enough data is available for ranking. The high relative risk sites were so ranked primarily because of the potential for contaminants to migrate through the groundwater pathway to the San Francisco Bay where both human and ecological receptors are present. Some sites were ranked high based on contamination present in the soil and the potential for workers on site or recreational users to be exposed to the contaminants. Seven removal actions have either been completed or are underway at the high ranked sites. The Agency for Toxic Substances and Disease Registry (ATSDR) performed a Public Health Assessment in FY94. Concerns were raised about restricting access to sites and subsistence fishing offshore of NSTI Hunters Point.

REGULATORY ISSUES



NATIONAL PRIORITIES LIST - NSTI Hunters Point was included on the National Priorities List in November 1989 based on a Hazard Ranking System Score of 48.77. The

presence of hazardous materials resulting from past shipyard operations and the operations of a private company who had leased NSTI Hunters Point from 1976 to 1986, contributed to the NPL classification.



LEGAL AGREEMENTS - A Federal Facility Agreement was signed in 1990. A revised agreement was signed by the California Department of Toxic Substances Control, the

California Regional Water Quality Control Board (San Francisco Bay Region), and by the Department of the Navy in 1991. It was also signed by the EPA Region IX in 1992. The agreement defines work schedules and

required deliverables for each operable unit. The FFA schedule was renegotiated in June 1995.



PARTNERING - While there are no formal partnering agreements, the BRAC Cleanup Team (BCT) was formed in FY94 and has helped improve communication and partnering

among the installation, EPA, and the state.

COMMUNITY INVOLVEMENT



RESTORATION ADVISORY BOARD - A Technical Review Committee (TRC) was established in 1988. The TRC was converted to a Restoration Advisory Board (RAB) in FY94 and

has 32 members from the community, local business, and regulatory agencies. The RAB meets monthly and is currently being reorganized. The RAB provides a forum for diverse opinions to be directed to the BCT and to resolve issues.



COMMUNITY RELATIONS PLAN - In 1989, a Community Relations Plan (CRP) was completed. It was updated in 1995. Other community relations activities include public meetings,

open houses, workshops, and distribution of fact sheets and newsletters. The CRP is presently being updated again.



INFORMATION REPOSITORY - An Administrative Record was established and information repositories were set up in 1989. The Information Repositories, containing copies of the

Administrative Record documents, are located at the following two local public libraries:

San Francisco Public Library Anna E. Waden Branch 5075 Third Street

San Francisco Public Library Main Library corner of McAllister and Larkin

Both repositories were updated in 1993 and are now updated quarterly.

BASE REALIGNMENT AND CLOSURE



BRAC - In 1991, NSTI Hunters Point was included in the Base Realignment and Closure (BRAC) Program. A BRAC Cleanup Plan was completed in FY94 and updated in FY95. In addition,

a Baseline Environmental Report was completed in July 1994. A revised approach to investigation and remediating sites was implemented at this time. Sites were divided into geographic areas, Parcels A-F, to facilitate investigation and remediation. The intent is to sell the land, parcel by parcel, as various parcels are remediated.

Parcel A: Sites 19, 41, 43, 45, 50 and AOCs 59 and 77.

Parcel B: Sites 6, 7, 10, 18, 20, 23-26, 31, 42, 45, 46, 50, and AOCs 60-62.

Parcel C: Sites 27-30, 45, 49, 50, 57, 58 and AOCs 63 and 64.

Parcel D: Sites 8, 9, 16, 17, 22, 32-39, 44, 45, 47, 48, 50, 53, 55 and AOCs 65-71.

Parcel E: Sites 1-5, 11-15, 21, 38-40, 45, 47, 48, 50-52, 54, 56 and AOCs 72-76.

Parcels D and E both include Sites 38, 39, 47 and 48. All the parcels include Site 45 (Steam Lines) and Site 50 (Storm Drains/



BRAC CLEANUP TEAM - A BRAC Cleanup Team (BCT) was formed in January 1994. The BCT meets every two weeks. The BCT has helped improve communication and partnering

among the installation, EPA, and the state. The BCT also has helped expedite cleanup. Small areas of contamination can now be excavated during the investigation process, eliminating the need to revisit the site. The BCT will use Records of Decision (RODs) to streamline the decisionmaking process. The BRAC Cleanup Plan was prepared in FY94 and is updated regularly.

5-104 As of 30 September 1995

TREASURE ISLAND NS HUNTERS POINT ANNEX



DOCUMENTS - A basewide Environmental Baseline Survey (EBS) was delayed because the many studies conducted at NSTI Hunters Point showed that there were no Community

Environmental Response Facilitation Act (CERFA) clean parcels. In order to speed reuse and transfer, a basewide EBS is now underway with completion expected by May 1996. Site specific EBSs will be conducted in conjunction with a Finding of Suitability to Lease (FOSL) as properties are prepared for leasing. The following property classifications were developed from an evaluation of historical documentation (baseline environmental reports) written during RI/FS activities.

Environmental Conditions of Property Classification										
1	2	3	4	5	6	7				
0 acres	35 acres	45 acres	8 acres	95 acres	236 acres	517 acres				



LEASE/TRANSFER - The final property transfer date has not been determined. Site specific EBSs will be conducted in conjunction with the FOSL/FOST processes as properties are prepared for leasing or transfer.



REUSE - The Reuse Plan was completed in March 1995. A preferred alternative has been approved by the Mayor's Hunters Point Shipyard Citizens' Advisory Committee. The next step is

approval by the City's Board of Supervisors. General reuse expectations are for education, arts, industrial, and maritime use.



FAST TRACK INITIATIVES - Hunters Point Annex has been divided into six parcels. This has allowed the accelerated remediation of one parcel. Parcel A may be transferred in

FY96. Other remediation techniques that have accelerated the cleanup include investigation by excavation, early removal actions, and shorter document review periods. Funding appropriations have, and will continue to fall short of the levels needed to maintain an accelerated response action program. The strategy so far has been to use available funds to maximize compliance with the enforceable Federal Facility Agreement (FFA) schedule.

Some sites at NSTI Hunters Point overlap or lie within another site and are considered as one site. This is the case for Site 1 (Industrial Landfill), Site 2 (Bay Fill Area), Site 21 (Building 810), Site 41 (Bldgs. 816 and 818) and Site 59 (Abandon 55-Gallon Drums). They will be considered separate sites for this discussion due to different Preliminary Assessment (PA) and Site Inspection (SI) dates. Underground Storage Tanks are currently being tracked by parcel.

HISTORICAL PROGRESS

FY84

Sites 1-12 - An Initial Assessment Study (IAS), equivalent to a Preliminary Assessment (PA), was completed and identified 12 potentially contaminated sites. Sites 2 and 10 were found not to pose a threat to human health or the environment and no further action was recommended. Site 12 (Bay Sediments), was found to have sediment contaminated with copper, lead, and zinc. No further action was recommended for Site 12 in the IAS based on the determination that the sediment was "best left undisturbed." Removal actions, with no further investigation, were recommended at Sites 4, 7 and 8. Sites 1-3, 5, 6, 9, 10 and 11 were recommended for further investigation.

FY87 - FY90

Sites 1, 4 and 8 - Contaminated soil removals were completed. Site 11 - Soil removal was complete and the site was capped. Sites 12-18 - Concurrent with the IAS, the San Francisco District Attorney's Office investigated allegations that a machine shop illegally disposed of hazardous waste at approximately 20 locations during its lease of portions of NSTI Hunters Point. A second PA was completed and Sites 12-18 were identified. The number 12 was re-used at this time and is not the same Site 12 identified in the 1984 IAS. Sites 12, 15 and 17 were recommended for an Remedial Investigation (RI). Sites 16 and 18 were recommended for an SI. The machine shop was indicted for illegal

Sites 19-58 - A third PA was completed. Of the forty sites identified (Sites 19-58), Sites 19 and 23-58 went on to an SI and Sites 20, 21 and 22 went directly to an Remedial Investigation/Feasibility Study (RI/FS).

Site 8 - Soil contaminated with the chemical additive PCB was discovered during the repair of an underground utility line in the vicinity of Building 503. A removal action was completed to remove soil containing PCB. Soil was excavated and transported to an off-site disposal facility. The site was included in the RI.

FY91

Site 1 - Began investigation of potential impacts from radiation generated from radium dials disposed of in the landfill.

USTs 1-5 - Underground Storage Tanks (USTs) were removed and some were closed in place. Removal Action Plans and Tank Abandonment Plans

were completed for 23 tanks within all 5 sites. The tanks were removed or closed in place.

FY92

Site 2 - A removal action to remove soil contaminated with heavy metals was completed.

Site 6 - Removal action of immediately adjacent soil was completed. Sites 16 and 18 - An SI was completed. Both sites were recommended for further action.

Sites 6 and 8-10 - Draft RI was completed and found PCBs, lead, zinc and Volatile Organic Compounds (VOCs) in soil and groundwater. A Public Health and Environmental Evaluation was completed. A draft FS was completed and Interim Remedial Actions (IRAs) were proposed for Sites 6, 9 and 10.

Sites 1-3, 6 and 10 - Site Soil Treatment Feasibility Study was completed. The study found that large quantities of contaminated soil will require remediation during the course of RI/FS activities. On-site soil remediation will not be effective for Sites 1 and 2 due to disseminated metals and other contamination dispersed throughout the ground mass.

USTs 1-5 - USTs are being tracked by parcel. Seven additional tanks were identified in Parcel C. Further investigation with no further excavation due to the close proximity of buildings or other structures to the tanks was recommended for 6 tanks. Additional excavation with no further investigation was recommended for one tank.

FY93

Ecological Sampling and Analysis Plan is completed. Field work began. First phase of a three-phased Ecological Risk Assessment (ERA) was completed. The ERA was necessary to determine any potential adverse effects on the biota in the area. The first phase involved the review of existing documentation, performing bioassays and field surveys, and identifying biota.

Site 2 - Removal of PCB-contaminated sludge and a 150,000 gallon tank was completed.

Site 6 - Removal of nine 12,000 gallon tanks and their foundations, one 210,000 gallon tank, and underground piping was completed. In addition, a clay and gravel cap was placed over the site and rainwater runoff was collected and drained to the existing storm drain.

As of 30 September 1995

disposal of hazardous waste.

TREASURE ISLAND NS HUNTERS POINT ANNEX PROGRESS DURING FISCAL YEAR 1995

FY95

The Reuse Plan was finalized in March 1995.

A basewide Environmental Baseline Survey was underway. Site specific EBSs will be conducted in conjunction with a Finding of Suitability to Lease (FOSL) as properties are prepared for leasing.

Federal Facility Agreement (FFA) schedules were renegotiated in June 1995 and now include schedules for Parcels A and F. Parcel F is the offshore portion of NSTI Hunters Point.

Completed draft RI/FS at Parcel A.

Site 9 - Removal of equipment, sunken baths, above ground structures, foundations, and soil contaminated with zinc and chromate began at the Pickling and Plate Yard. The project team included local residents who were specifically hired and trained to perform this work.

Site 3 - An Engineering Evaluation/Cost Analysis (EE/CA) is underway. A treatability study for chemical/thermal bioremediation in-situ is also underway. The treatability study is part of the removal action and may be used for the final remedy.

Sites 1, 2, 6, 50, 57 and basewide - Removal action activities continued. Sites 19, 41 and 43 - These sites were determined to be RC.

UST 1 - This site was determined to be RC.

PLANS FOR FISCAL YEARS 1996 AND 1997

FY96

A basewide EBS is expected to be complete in May 1996.

The Community Relations Plan is being revised and will be completed in FY96.

Parcel A - A draft and final No Action Record of Decision (ROD) will be completed in FY96. Parcel A will be transferred in FY96.

 $\boldsymbol{Parcel\;B}$ - A draft RI/FS will be completed.

Parcel D - A draft RI/FS will be completed..

Parcels B, C, D and E - Removal actions planned include groundwater plume, storm drains, and exploratory excavation. Remedies considered include groundwater pump and treat, iron curtain, and excavation and disposal.

FY97

Parcel B - A draft and final ROD will be completed.

Parcel C - A draft RI/FS and a draft ROD will be completed in FY97, with final ROD in FY98.

Parcel D - A draft and final ROD will be completed ..

Parcel E - A draft and final RI/FS will be completed in FY97 and a draft and final ROD in FY98.

PROGRESS AND PLANS

CERCLA	FY94 and before	FY95	FY96	FY97	FY98	FY99	FY00	FY01 and after
PA	57							
SI	45	3	1					
RI/FS		3		31	23			
RD					12	42		
RA							3	51
IRA	5(9)		1(1)	9(10)	5(5)	2(2)		1(1)
RC	1	3					3	51
Cumulative Response Complete	2%	7%					12%	100%
UST	FY94 and before	FY95	FY96	FY97	FY98	FY99	FY00	FY01 and after
UST		FY95	FY96	FY97	FY98	FY99	FY00	
	before	FY95	FY96	FY97	FY98	FY99	FY00	
ISC	before		FY96	FY97	FY98	FY99	FY00	
ISC INV	before	1	FY96			FY99 Σ	FY00	
ISC INV CAP	before	1	FY96		1		FY00	
ISC INV CAP DES	before	1	FY96		1	2		after
ISC INV CAP DES IMP	before	1	FY96		1	2		after